



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

| APPLICATION NO.  | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.          | CONFIRMATION NO.       |
|--|-------------|----------------------|------------------------------|------------------------|
| 10/713,601   | 11/14/2003  | Leonid Kazakevich    | I-2-0438.1US                 | 2510                   |
| 24374 7590 04/18/2007<br>VOLPE AND KOENIG, P.C.<br>DEPT. ICC<br>UNITED PLAZA, SUITE 1600<br>30 SOUTH 17TH STREET<br>PHILADELPHIA, PA 19103 |             |                      | EXAMINER<br>GESESSE, TILAHUN |                        |
|  |             |                      | ART UNIT<br>2618             | PAPER NUMBER           |
| SHORTENED STATUTORY PERIOD OF RESPONSE<br>3 MONTHS   |             |                      | MAIL DATE<br>04/18/2007      | DELIVERY MODE<br>PAPER |

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|                              |                                       |  |  |
|------------------------------|---------------------------------------|--|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/713,601  | <b>Applicant(s)</b><br>KAZAKEVICH ET AL. |  |
|                              | <b>Examiner</b><br>Tilahun B. Gesesse | <b>Art Unit</b><br>2618                  |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 January 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This is in response to applicant's amendment and response filed January 22, 2007 , in which claims 1 through 20 are pending.

### Response to Arguments

1. On page 8, third paragraph of response , applicant argued that Oda does not teach or suggest use of plurality of receivers. Further more, applicant admitted in the same paragraph that Oda receiver has number of fingers to be used for RAKE reception in accordance with an occurrence state of multi-path. The examiner disagrees. Oda clearly teaches a CDMA reception apparatus has a plurality of fingers and performs RAKE reception by RAKE combining outputs from the plurality of fingers (see abstract , column 3, lines 59-column 4, lines 20 , column 4 line 60-column 5 lines 1-23 ,column 5, lines 55-column 6, lines 13 and figures 2 and 6,13, 15-18).

On page 9, third paragraph of response applicant argued that each of the plurality of receivers receives and processes its own copy of a communication signal.

The examiner disagrees. In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., each of the plurality of receivers receives and processes its own copy of a communication signal) are not recited in the rejected claim(s). Although the claims are interpreted in light of the

Art Unit: 2618

specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

### **Claim Rejections - 35 USC § 103**

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oda (US 6,628,698) in view of Schwengler et al (US 7,031,753).

Claims 1,19 Oda teaches a wireless transmit/receive unit (see fig.6) in which number of figure receives 38-1-38-n) comprising:

Oda teaches a plurality of receivers , each configured to receive and process (see figures 2 and 6, (50-1-50-N) wireless communication signals for producing respective versions of a wireless communication intended for reception by the WTRU (figure receivers 38-1 to 38-n processes signal received by the WTRU and provides to rake reception section 39, see abstract , column 3, lines 59-column 4, lines 20 , column 4 line 60-column 5 lines 1-23 column 5, lines 55-column 6, lines 13 and figures 2 and 6,13, 15-18).

Oda teaches an interface coupled to the receivers configured to combine respective versions of a wireless communication and produce a combined version of the wireless communication (see figure 2 item 51). Oda teaches a selectively controllable power supply unit for powering each of the receivers (see figure 13, power switch coupled to each figure receives and switches based on CPU control signal).

Oda teaches a control unit coupled with the receivers, the interface and the power supply unit and configured to monitor predetermined parameters to thereby selectively control the powering of the receivers based on predetermined thresholds such that selected receivers are not powered under predetermined conditions when it is desirable to limit energy consumption (see figures 13-19 and column 11 line 6-column 15, lines 46) in which Oda teaches extract data compared with threshold and if is higher power a single figure receiver if it equal or less then supply power to all figure receives so that by powering single receiver conserve power of the WTRU.

Oda does not expressly teach the power supply unit is adapted for one batteries. Schwengler teaches a battery as a power supply (see col. 4, lines 46-57). Then, it would have been obvious to an artisan of ordinary skill in the art the time of the invention was made to power wireless terminal using a battery pack. Claims 2-4,13 Oda teaches the interface includes received signal power monitoring circuitry configured to output a received signal power indication and the control unit is configured to utilize a predetermined received signal power level as one threshold for controlling the powering of the receivers such that at

Art Unit: 2618

least one receiver is not powered when the received signal power indication output by the interface exceeds the received signal power level threshold (see figure 6 item 37 and figure 13 and see col. 11, line 55-68 and col.12, lines 29-48).

Claims 5 and 14-16, Oda teaches the interface includes received signal Quality of Service monitoring circuitry configured to output a received signal QOS indication and the control unit is configured to utilize a predetermined received signal QOS level as one threshold for controlling the powering of the receivers such that at least one receiver is not powered when the QOS indication output by the interface exceeds the received signal QOS level threshold ( see figure, 17 and col.13 line 28-54).

Claim 9. Oda teaches the WTRU has a primary receiver that is powered in a manner not controlled by the control unit and a secondary receiver that is powered in a manner controlled by the control unit (see fig.13) in which at time the controller powers a single receiver and the rest of receivers un powered and the un powered receives not controlled at the time of off switch.

Claim 10. Oda teaches the WTRU is configured as a mobile unit for use in a Code Division Multiple Access (CDMA) wireless communication system (see abstract).

Claim 12. Oda teaches a wireless transmit/receive unit (see fig.6) in which number of figure receives 38-1-38-n) comprising: Oda teaches a plurality of receivers each configured to receive and process (see figures 2 and 6, (50-1-50-N) wireless communication signals for producing respective versions of a wireless communication intended

Art Unit: 2618

for reception by the WTRU (figure receivers 38-1 to 38-n processes signal received by the WTRU and provides to rake reception section 39, see abstract , column 3, lines 59-column 4, lines 20 , column 4 line 60-column 5 lines 1-23, column 5, lines 55-column 6, lines 13 and figures 2 and 6, 13, 15-18).

Oda teaches an interface coupled to the receivers configured to combine respective versions of a wireless communication and produce a combined version of the wireless communication (see figure 2 item 51)

Oda teaches a selectively controllable power supply unit for powering each of the receivers (see figure 13, power switch coupled to each figure receives and switches based on CPU control signal).

Oda teaches a control unit coupled with the receivers, the interface and the power supply unit and configured to monitor predetermined parameters to thereby selectively control the powering of the receivers based on predetermined thresholds such that selected receivers are not powered under predetermined conditions when it is desirable to limit energy consumption (see figures 13-19 and column 11 line 6-column 15, lines 46) in which Oda teaches extract data compared with threshold and if is higher power a single figure receiver if it equal or less then supply power to all figure receives so that by powering single receiver conserve power of the WTRU.

Oda does not expressly teach the power supply unit is adapted for one batteries. Schwengler teaches a battery as a power supply (see col. 4, lines 46-57). Then, it would have been obvious to an artisan of ordinary skill in the art the time of the invention was made to power wireless terminal using a battery pack.

Claim 20, Oda teaches the WTRU is a mobile unit, further comprising using the WTRU for wireless communication in a Code Division Multiple Access (CDMA) wireless communication system (see abstract).

Claims 6-7,17,Oda does not expressly teach the power supply unit is adapted for one batteries. Schwengler teaches a battery as a power supply (see col. 4, lines 46-57). Then, it would have been obvious to an artisan of ordinary skill in the art the time of the invention was made to power wireless terminal using a battery pack.

Claims 8,18, Oda does not teach the power supply unit includes a line-in power input and is configured to output an override signal when power.

However, Schwengler teaches the power supply unit includes a line-in power input and is configured to output an override signal when power is supplied (see col. 1, line 66-col.2, lines 8). Then, it would have been obvious to an artisan of ordinary skill in the art the time of the invention was made to power wireless terminal using external power source wall power outlet, in Oda system, as evidenced by Schwengler, a mobile unit having a finite internal power supply , for the mobile unit to operate longer and prevent from running out power now and then.

Claim 11. Oda does not teach an application specific integrated circuit (ASIC). However, Schwengler teaches a mobile unit functionality embodied in microprocessor or ASIC (see col. 4 lines 30-37). Then, it would have been obvious to an artisan of ordinary skill in the art at the time of the invention was made to use microprocessor or ASIC for monitoring the function of the mobile



Art Unit: 2618

unit operation.

### **Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure

GB 2345416 (Taguchi) teaches reducing power consumption in a diversity wireless communication apparatus, two receivers demodulate signal received by respective antennas and output reception signal and power supply to

Art Unit: 2618

at least one of the receiving circuit is then disconnected by switching based on this comparison (see abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 571-272-7879. The examiner can normally be reached on flexible schedule.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Urban can be reached on 571-272-7899.

The Central FAX Number is 571-273-8300. For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TG

April 10, 2007

  
TILAHUN GESESSE  
PRIMARY EXAMINER